

REMARKS

The present Amendment amends claims 36, 38 and 42 and leaves claims 37 and 39-41 unchanged. Therefore, the present application has pending claims 36-42.

Figs. 2-5 stand objected to being that the Examiner alleges that these figures should be designated by a legend "Prior Art". Filed on even date herewith are Proposed Drawing Correction/Replacement Sheets adding the legend "Prior Art" to Figs. 2-5. Approval of the Proposed Drawing Correction/Replacement Sheets is respectfully requested.

Claims 36, 38 and 42 stand rejected under 35 USC §103(a) as being unpatentable over Beglin (U.S. Patent No. 4,638,424) in view of Bond (U.S. Patent No. 6,275,938); and claims 37, 39 and 41 stand rejected under 35 USC §103(a) as being unpatentable over Beglin and Bond and further in view of Lambrecht (U.S. Patent No. 6,549,954). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 36-42 are not taught or suggested by Beglin, Bond or Lambrecht whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw these rejections.

The present invention is directed to an object access module is sent to the storage apparatus equipped with a block access module, i.e. a program module presenting block-based I/O function (read/write function for block units), from a computer via network. The object access module is a program module for providing

read/write I/O function to data stored in a plurality of non contiguous storage units by using the above mentioned block access module and is registered in a active network storage controller of the storage apparatus. Hence, in the result, the storage apparatus becomes having an object I/O function.

Beglin merely discloses data structure, for example, "a set of primary DASD volumes 14, also labeled L0 DASD..." (Column 6, line 48-). Beglin however, does not teach or suggest the features of the present invention which has double layers of program modules. Further, Beglin does not teach or suggest that the storage apparatus becomes having the upper function by sending or being downloaded the upper program module from the exterior of the storage apparatus such as in the present invention.

Even if Beglin and Bond are combined as suggested by the Examiner the combination does not teach or suggest, for example, sending Java Applets and executing the downloaded Applets in a specified area, sandbox such as in the present invention.

According to the present invention, an advanced function module is sent and downloaded to the storage apparatus in order to let the storage be equipped with advanced functions for specific applications (sorting, image processing and basic operations of a database system) (Page 7, line 11- in this Specification), in addition to the above mentioned object access module which reads/writes I/O to data stored in a plurality of non contiguous storage units commonly needed for achieving the advanced functions. The advanced function module achieves the advanced functions by using the object access module.

The merit of the above feature is disclosed in, for example, Page 11, line 11 - Page 12, line 10 etc. in this Specification. Such method for constituting multi-program modules environment on storage apparatus is not suggested even if combining any prior art.


The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 36-42.

In view of the foregoing amendments and remarks, applicants submit that claims 36-42 are in condition for allowance. Accordingly, early allowance of claims 36-42 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.; Deposit Account No. 50-1417 (520.37728X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120